

South Main Service Center
Soil Removal / Site Remediation Report
September 1993

OCT 04 1993
Winston-Salem
Regional Office

Introduction / Site History

South Main Service Center (aka Arvil Stanley Texaco) is located at 802 South Main Street (at the intersection of South Main Street and Bank Street) in Mount Airy, North Carolina. Four underground storage tanks (USTs) were formerly used at the site and underwent permanent closure in December 1992. During the Site Investigation for Permanent Closure, it was determined through laboratory analyses that soils which had been located under the pump island were contaminated with diesel fuel in concentrations up to 19,000 parts per million (ppm). A site investigation performed by Engineering Tectonics, P.A. determined that the soil contamination did not extend beyond a depth of 10 feet below the center of the former pump island location. The investigation performed by Engineering Tectonics also provided information concerning soil type (predominantly sandy silt to a depth of 25 feet underlain by silty sand) and depth to groundwater (32 feet below grade). A Site Sensitivity Evaluation was performed based on the information provided in the report from Engineering Tectonics to determine a Site Characteristics Score of 80, an Initial Cleanup level of 240 ppm based on EPA Method 3550, and a Final Cleanup Level of 480 ppm based on EPA Method 3550. The combined information from all investigations performed was used to estimate the amount of contaminated soils which would have to undergo removal and/or remediation and an application was made to landfarm these soils off-site. Certificate #WSRO-64, Certificate of Approval for Disposal of Soils Containing Petroleum Products, was issued in June 1993 for disposal of soils from this site at a landfarm on the Earlie Gilley Property in Pilot Mountain, North Carolina.

This report details the removal of contaminated soils from the site and the collection and analysis of soil samples from the soils which remain in-place. Because the contaminants present were much heavier than fresh diesel fuel, they were difficult to detect using standard field methods. The soil removal was therefore done in several phases with a wait between each phase of work to receive laboratory analysis reports to determine the areas of contamination which remained to be removed. Figure 1 indicates the soil removed during each phase of the removal procedures as well as indicating sample locations and both field and laboratory analyses results.

Phase 1 - Soil Removal Based on OVA readings

Because the SSE determined Final Cleanup Limit was 480 ppm and Organic Vapor Analyzer readings have been found to be approximately 1/4 as high as laboratory analyses of diesel fuel contaminated soils, the first soil excavation goal was to remove all soils which exhibited OVA readings greater than 100 ppm. This first phase of soil removal was performed on August 12 and August 16, 1993. Approximately 25 cubic yards (yd³) of soil were removed before OVA readings were below 100 ppm on all sides of the excavation.

Once the OVA readings indicated that the contaminated soils had been removed, soil samples were collected from each side of the excavation and from the bottom of the excavation. The soil

samples were obtained by scooping the soils from their in-situ locations with a backhoe bucket, the sample collector then collected by hand a sufficient amount of soil from the backhoe bucket to fill a 4 oz. glass container. The soil was packed into the container to minimize the amount of head space. The sample container was then sealed with a teflon lined lid, labeled for identification and placed in a cooler with blue ice. The samples were maintained on ice until delivery to BioRemediation Research Ltd. for analysis by EPA Methods 5030 and 3550.

The soil analyses indicated that the extent of contamination had been reached on the east and west sides of the excavation. However, petroleum hydrocarbons were still present in soils at the bottom of the excavation and on the north and south sides in concentrations between 265 and 16,202 ppm. Dr. Ken Goehle of BioRemediation Research Ltd reported verbally that the gas chromatograms indicated the contamination consisted primarily of long-carbon-chain hydrocarbons consistent with very old diesel fuel or heavier oil and would not likely be detected in vapor form at room temperature. This prompted a second phase of soil removal with field analyses based on a different method of hydrocarbon detection.

Phase 2 - Soil Removal Based on Colorimetric Field Analysis

A colorimetric method of field analysis (available commercially as Hanby Analytical Laboratories Test Kit for Aromatic Hydrocarbons or HAL Test Kit) based on a Friedel-Crafts alkylation of aromatic hydrocarbons was chosen to detect the presence of hydrocarbons during the second phase of soil removal. Because this method of analysis does not rely on vapors it is believed to be more accurate in detection of heavy (i.e. long-chain) hydrocarbons; however, quantitation is not as accurate.

Additional soils were excavated approximately 3 feet on the north side of the excavation, to an additional 2 feet in depth for a total depth of 11.5 feet, and approximately 6 feet to the south. The extents of the excavation are shown on Figure 1. Field analysis of soil samples collected on the new north wall and bottom of the excavation did not detect any aromatic hydrocarbons. Field analysis of a soil sample from the new south wall of the excavation indicated that aromatic hydrocarbons were present above a concentration of 200 ppm, but an accurate determination of the concentration was not possible with this method of analysis. By the time the excavation had been expanded to these extents it was late in the day and further excavation to the south would require removal of additional concrete from the parking area. Mr. Harrell requested that soil samples be collected from these new excavation extents and submitted for laboratory analysis with the hope that the soil sample from the south wall of the excavation might contain less hydrocarbons than the 480 ppm final cleanup level. Soil removed during this phase was estimated to be approximately 10 yd³.

Soil samples were collected using the procedures outlined in the report of Phase 1 soil removal. Analyses of the samples by EPA Methods 5030 and 3550 indicated that the extent of contaminated soils had been reached to the north and bottom of the excavation. The soil sample collected from the south wall of the excavation was reported to contain 762 ppm petroleum hydrocarbons. Although the concentration of hydrocarbons had been reduced from over 16,000 ppm to 762 ppm, the SSE final cleanup limit had not yet been attained and further excavation was necessary.

Phase 3 - Soil Removal Based on Estimated Concentration Reduction with Distance from Source

GeoScience and Technology notified Mr. Joe Harrell that the last sample from the south side of the excavation was much lower than the sample from the previous extent of excavation but was still not below the final clean-up limit. Mr. Harrell decided to extend the excavation another 10 feet to the south in the small area which appeared to be contaminated. According to Mr. Joe Harrell, approximately 8 yd³ of soil were removed during this phase of soil removal. Two additional samples were taken from the new and final extent of excavation by Mr. Harrell and submitted to Bioremediation Research, Ltd. for laboratory analysis. Analysis by EPA Method 5030 and 3550 extractions and 8015 analysis indicated both samples to be below 10 ppm.

Fate of Contaminated Soil

Contaminated soil removed during each of the phases of soil removal were transported to a landfarm on the Earlie Gilley Property in Pilot Mountain, North Carolina. Certificate of Approval for Disposal of Soils Containing Petroleum Products, Certificate #WSRO-64, was issued in June 1993 for disposal of soils from South Main Service Center at this site. Approximately 1000 pounds of agricultural lime and 1200 pounds of 10-10-10 fertilizer have been incorporated into the soils to prepare it for landfarming. Once the soils were spread over the area, the entire area was seeded with fescue grass. As noted in the Certificate of Approval's "Special Conditions, Limitations and Comments", soil samples will be collected and analyzed "at the end of 6 months using approved EPA analytical methods".

Summary

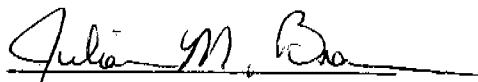
Soils in the area of the former pump island location which were contaminated with diesel fuel or heavy petroleum fuel hydrocarbons have been removed to a landfarm in Pilot Mountain, North Carolina. Laboratory analyses of soil samples collected from the excavation indicate that the soils allowed to remain in place are within the SSE final cleanup level of 480 ppm.

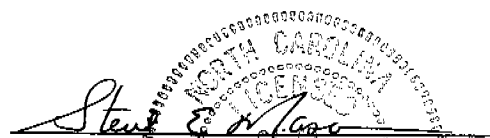
No further action is required at the South Main Service Center location.

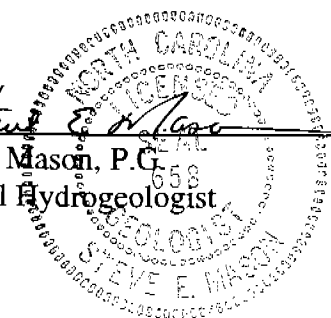
Monitoring of soils at the landfarm will take place in 6 months to determine the effectiveness of the soil remediation. It will be determined at that time whether or not further actions are required at the landfarm location.

Certification

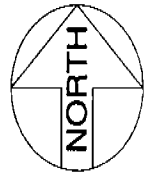
I hereby certify this 29th day of September, 1993 that this report was prepared by me or under my direct supervision.


Julianne M. Braun
Staff Geochemist

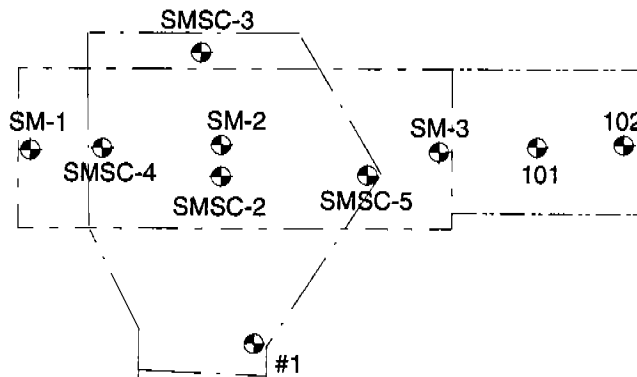

Steve E. Mason, P.G.
Principal Hydrogeologist



S. Main Street



Bank Street



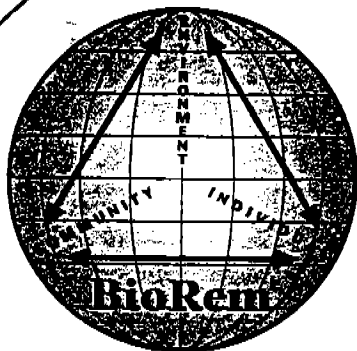
LEGEND

- · — Extent of Excavation (08/16/93)
- · — Extent of Excavation (08/24/93)
- · — Extent of Excavation (08/26/93)

Former location of distribution lines

Building

GeoScience & Technology, P.A.	Job No.: 93-104
	Drawn By: JMB
	Approved By: SEM
South Main Service Center	
Site Map with Sample Locations	
1" = 10' Scale	Figure 1



BIOREMEDIATION RESEARCH, LTD.

1720-B VARGRAVE STREET
WINSTON-SALEM, NC 27107-2297
919-631-9104
FAX 919-631-9102


CERTIFICATE OF ANALYSIS

August 17, 1993

Client: GeoScience & Technology, P.A.
Project: South Main Service Center

EPA 5030/8015;3550/8015: Volatiles/Semi-volatiles

Client Sample	Lab Sample	TPH(5030)	TPH(3550)
#1	9300535	< 10 ppm	< 10 ppm
SMSC-2	9300531	903	822
SMSC-3	9300532	< 10	< 10
SMSC-4	9300533	4207	265
SMSC-5	9300534	4604	16202


Kenneth H. Goeble, Ph.D.

CHAIN OF CUSTODY RECORD

BIOREMEDIATION RESEARCH, LTD.

1720 Vargrave Street
Winston-Salem, NC 27107

Telephone (919) 631-9104 Fax (919) 631-9102

Telephone (919) 631-9104 Fax (919) 631-9102

1

[illegible]

CHAIN OF CUSTODY RECORD

Use ballpoint pen only, press hard

Client Name: GED Science & Technology

Project: S. MAIN SERVICE CENTER

Attention: STEVE WILSON

Telephone: 896-1300

BIOREMEDIATION RESEARCH, LTD.

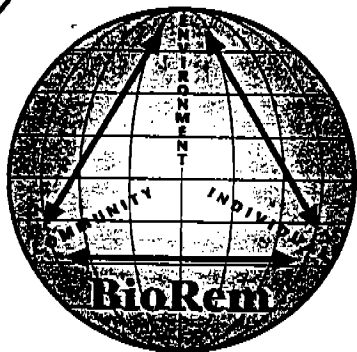
1720 Vargrave Street

Winston-Salem, NC 27107

Telephone (919) 631-9104 Fax (919) 631-9102

[illegible]

PINK - CUSTOMER COPY



BIOREMEDIATION RESEARCH, LTD.

1720-B VARGRAVE STREET
WINSTON-SALEM, NC 27107-2297
919-631-9104
FAX 919-631-9102


CERTIFICATE OF ANALYSIS

August 26, 1993

Client: GeoScience & Technology, P.A.
Project: South Main Service Center

EPA 5030/8015;3550/8015: Volatiles/Semi-volatiles

Client Sample	Lab Sample	TPH(5030)	TPH(3550)
SM-1	9300546	< 10 ppm	< 10 ppm
SM-2	9300547	< 10	< 10
SM-3	9300548	100	762


Kenneth H. Goehle, Ph.D.

Page 1 of 1

BIOREMEDIATION RESEARCH, LTD.

1720 Vargrave Street

Winston-Salem, NC 27107

Telephone (919) 631-9104 Fax (919) 631-9102

Quelques notes

[illegible]

**BIOREMEDIATION RESEARCH, LTD.**

1720-B VARGRAVE STREET
WINSTON-SALEM, NC 27107-2297
919-631-9104
FAX 919-631-9102

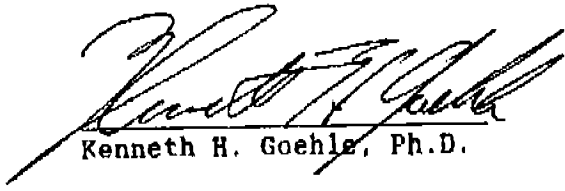
**CERTIFICATE OF
ANALYSIS**

August 27, 1993

Client: Harrell Oil Co.
Project: South Main Service Center

EPA 5030/8015;3550/8015: Volatiles/Semi-volatiles

Client Sample	Lab Sample	TPH(5030)	TPH(3550)
101	9300556	< 10 ppm	< 10 ppm
102	9300557	< 10	< 10


Kenneth H. Goehle, Ph.D.

Page of

Client Name: Harrell Oil
Project: South Main Service Center
Attention: J. Harrell
Telephone: 789-9051

1720 Vargrave Street

Winston-Salem, NC 27107

Telephone (919) 631-9104 Fax (919) 631-9102

HARRELL OIL

19197864853

P. 035

[illegible]

SITE SENSITIVITY EVALUATION FOR PETROLEUM CONTAMINATED SOIL

The purpose of the Site Sensitivity Evaluation (SSE) is to evaluate the sensitivity of groundwater to contamination by the release of petroleum related substances from the vadose zone. The "in-situ" soil clean-up levels, based on total petroleum fuel hydrocarbons (TPFH) and/or oil and grease (O&G), is determined by the SSE score; i.e., higher SSE scores require a lower TPFH or O&G soil clean-up level. The SSE is only applicable for petroleum contaminated sites.

If groundwater levels at the site are generally known, or can be determined from field observations, one boring may be sufficient to obtain information necessary to complete the SSE. Also, if a release is discovered during a tank excavation, field investigations such as test pits, soil borings, or deeper excavation into the tank pit itself, may provide the necessary information.

A Site Sensitivity Evaluation should be performed on all sites that meet the following criteria:

1). Contaminated soils are located 5 feet or more from the water table, top of bedrock or transmissive indurated sediments (shell limestone, fractured shale or sandstone, etc.) at sites in category A or B. The applicability of the separation distance on sites in category C, D, or E will be determined by DEM.

2). Contaminated soil does not create a human exposure pathway via ingestion, absorption, or inhalation.

NOTE: For sites where the criteria in 1 and 2 above are not met, the clean-up levels will be 10 ppm TPFH (EPA Method 5030), 40 ppm TPFH (EPA Method 3550), or 250 ppm TPFH (EPA Method 9071) (unless DEM specifies otherwise). The references to EPA methods 5030 and 3550 throughout this document include the use of the California GC-FID method for TPFH and are referred to only as 5030 and 3550 for brevity.

The Site Sensitivity Evaluation (SSE) will determine the soil clean-up levels that must be achieved for each site. Depending on the SSE scores, the final clean-up level for site soils may range between 10 to 300 ppm TPFH (for EPA Method 5030), 40 to 1200 ppm TPFH (for EPA Method 3550), and 250 to 3000 ppm O&G (for EPA Method 9071). Soils exhibiting contamination levels **greater than (>)** 300 ppm TPFH (for EPA Method 5030) or **> 1200 ppm TPFH** (for EPA Method 3550), or **> 3000 ppm TPFH** (for EPA Method 9071) **must** be remediated (unless otherwise directed by DEM).

"Contaminated soil" in this document refers to soils containing greater than 10 ppm TPFH for low boiling point fuels, greater than 40 ppm TPFH for medium boiling point fuels and greater than 250 ppm for oil and grease. Remedial activities will not be required on soil exhibiting TPFH levels of less than or equal to (\leq) 10 ppm TPFH (EPA Method 5030), levels

of ≤ 40 ppm TPFH (EPA method 3550), and O&G levels of ≤ 250 ppm (EPA Method 9071). However, in cases where groundwater have been contaminated or other special site conditions exist, a lower clean-up level and/or additional investigation may be required by the DEM.

In any case, whenever soil remediation is necessary, the treatment/disposal technologies that are utilized should be cost effective and provide adequate protection of human health and the environment.

SITE SENSITIVITY EVALUATION (SSE)

STEP 1: Site Characteristics Evaluation

The sensitivity of groundwater to contamination from petroleum contaminated soils is evaluated by assessing 5 specific site characteristic. These characteristics are rated in accordance with their potential for contributing to the contamination of groundwater; the greater the potential contribution, the higher the score. The overall sensitivity of a site is determined by a numerical value representing the sum of values for each site characteristic.

Complete the SSE score sheet (Table 1) and proceed to step 2

Explanation of Site Characteristics

Grain Size - The main objective of this analysis is to estimate soil permeability, potential for contaminant attenuation, and whether zone restrictions for contaminant transfer exist.

Sample Collection and Location: The sample collected for determination of grain size should be **representative** of the **predominant** soil type found in the area of the deepest contaminated soils located beneath the tank pit, or in proximity to the tank pit (in the apparent downgradient direction.) Retaining this soil sample for future reference is advisable.

Sample Classification: The soil sample collected as described above should be classified according to the Unified Soil Classification System (ASTM designation D-2487) or the U.S. Department of Agriculture's method of soil classification. (A visual and textural field inspection will suffice.)

NOTE: *Sample collection and classification should be performed by a qualified person, who through a combination of training and experience, is competent to evaluate the conditions existing at an underground storage tank (UST) system site, including the physical and chemical conditions of the subsurface. (A geologist, soils scientist, engineer or technician active in this field and with experience should be qualified).*

Relict structures, sedimentary structures, and/or textures present in the zone of contamination and underlying "soils"- Structures in soils that may significantly increase the permeability such as numerous quartz veins, fractures, coarse grained sandy bed in clays and silts, weathered coarse grained igneous intrusions, etc.

Distance from location of deepest contaminated soil to water table - The determination may be based upon water table wells in the immediate vicinity, mottling of the soil, an auger hole in the excavation or immediate vicinity, or specific knowledge of an area. If an auger hole is made in the excavation, it shall immediately be grouted with neat cement or bentonite.

Is the top of bedrock or transmissive indurated sediments located above the water table?
Is there evidence of a water table at the top of bedrock or top of transmissive indurated sediments (shell limestone, fractured shale or sandstone, etc.)?

Artificial conduits present within the zone of contamination - Are there water lines, sewer lines, telephone cables, product dispensing piping, etc., in contamination zone?

Complete the SSE score sheet (Table 1). Proceed to Step 2.

STEP 2: Initial Clean-up Level (See Table 2)

Once the SSE score has been obtained, select the corresponding initial clean-up level for the type of hydrocarbons (low boiling point, medium boiling point, or oil and grease) released on site. Proceed to Step 3.

STEP 3: Final Clean-up Level (See Table 2 and Site Category Descriptions)

Determine and document the site category (A, B, C, D, or E) based on field evaluations. Use Table 2 and the Site Category Descriptions to select the corresponding final clean-up level. Based on the final clean-up levels obtained, determine the quantity of soil that requires remediation.

Submit data and other evidence used in the determination of the final cleanup level to the appropriate Regional Office. Upon review of the information provided, the Regional Office will verify the site's final soil cleanup level. Upon completion of the SSE, the responsible party should immediately begin remediation of soils containing TPFH concentrations in excess of the final proposed cleanup level. The responsible party should maintain accurate records of the remediation process and be prepared to justify all remediation activities.

Table 1
Site Sensitivity Evaluation (SSE)
 Site Characteristics Evaluation (Step 1)

Characteristic	Condition	Rating	
Grain Size*	Gravel Sand <u>Silt</u> Clay	150 100 50 0	50
Are relict structures, sedimentary structures, and/or textures present in the zone of contamination and underlying "soils".	Present and intersecting the water table. Present but <u>not</u> intersecting the water table. <u>None present.</u>	10 5 0	0
Distance from location of deepest contaminated soil** to water table.	5 - 10 feet <u>>10 - 40 feet</u> >40 feet	20 10 0	10
Is the top of bedrock or transmissive indurated sediments located above the water table?	<u>Yes</u> No	20 0	20
Artificial conduits present within the zone of contamination.	Present and intersecting the water table. Present but <u>not</u> intersecting the water table. <u>Not present.</u>	10 5 0	0
Total Site Characteristics Score:			80

* **Predominant** grain size based on Unified Soil Classification System or U.S. Dept. of Agriculture's Soil Classification Method.

** (>10 ppm TPH by Method 5030; >40 ppm TPH by Method 3550; >250 ppm O&G by Method 9071)

Table 2

Site Sensitivity Evaluation (SSE)Initial Cleanup Level
(Step 2)Final Cleanup Level
(Step 3)

Low Boiling Point Hydrocarbons			
Total Site Characteristics Score	Initial Cleanup Level TPFH (ppm) EPA Method 5030		Final Cleanup Level
>150	≤10	Select Site Category* →	Category A & B (Multiply initial cleanup level by 1) 1 x _____ = _____ ppm
121-150	20		Category C & D (Multiply initial cleanup level by 2) 2 x _____ = _____ ppm
91-120	40		Category E (Multiply initial cleanup level by 3) 3 x _____ = _____ ppm
61-90	60		
31-60	80		
0-30	100		

Medium Boiling Point Hydrocarbons			
Total Site Characteristics Score	Initial Cleanup Level TPFH (ppm) EPA Method 3550		Final Cleanup Level
>150	≤40	Select Site Category* →	Category A & B (Multiply initial cleanup level by 1) 1 x _____ = _____ ppm
121-150	80		Category C & D (Multiply initial cleanup level by 2) 2 x <u>240</u> = <u>480</u> ppm
91-120	160		Category E (Multiply initial cleanup level by 3) 3 x _____ = _____ ppm
<u>61-90</u>	<u>240</u>		
31-60	320		
0-30	400		

Oil & Grease (O&G)			
Total Site Characteristics Score	Initial Cleanup Level O&G (ppm) EPA Method 9071		Final Cleanup Level
>150	≤250	Select Site Category* →	Category A & B (Multiply initial cleanup level by 1) 1 x _____ = _____ ppm
121-150	400		Category C & D (Multiply initial cleanup level by 2) 2 x _____ = _____ ppm
91-120	550		Category E (Multiply initial cleanup level by 3) 3 x _____ = _____ ppm
61-90	700		
31-60	850		
0-30	1000		

* See Site Category Descriptions

TABLE 3
SITE SENSITIVITY EVALUATION (SSE)

SITE CATEGORY DESCRIPTIONS

CATEGORY A (*Site meets any one of the criteria*)

1. Water Supply well(s) contaminated and not served by accessible public water supply.
2. Vapors present in confined areas at explosive or health concern levels.
3. Treated surface water supply in violation of the safe drinking water standards.

CATEGORY B (*Any One*)

1. Water supply well(s) contaminated, but served by accessible public water supply.
2. Water supply well(s) within 1500 feet of site, but not contaminated and not served by accessible public water supply.
3. Vapors present in confined areas but not at explosive or health concern levels.

CATEGORY C (*Both*)

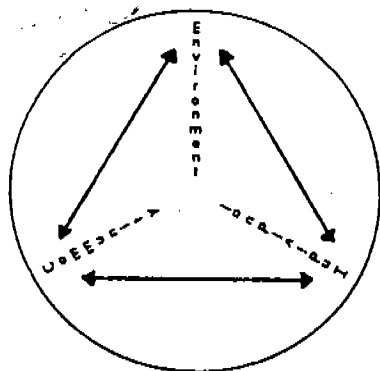
1. No known water supply well(s) contaminated.
2. Water supply well(s) greater than 1500 feet from site but not served by accessible public water supply.

CATEGORY D (*Both*)

1. No known water supply well(s) contaminated.
2. Water supply well(s) within 1500 feet of site but served by accessible public water supply.

CATEGORY E (*Both*)

1. No known water supply well(s) contaminated or within 1500 feet of site.
2. Area served by accessible public water supply.



BIOREMEDIATION RESEARCH, LTD.

RT. 2, BOX 180-C
PINNACLE, NC 27043
919-325-2318

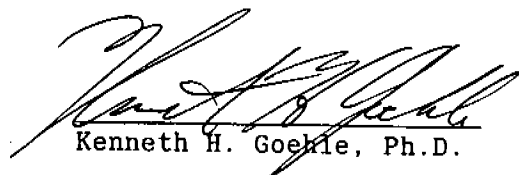
CERTIFICATE OF ANALYSIS

February 11, 1993

Client: Engineering Tectonics, P.A.
Project: Arvil Stanlet: Mt. Airy
ET Job#: 93-159-E

EPA 5030/8015;3550/8015: Volatiles/Semi-volatiles

Client Sample	Lab Sample	TPH(5030)	TPH(3550)
S1	9300107	< 10 ppm	< 10 ppm


Kenneth H. Goekle, Ph.D.

ENGINEERING TECTONICS, P.A.

PROJECT NAME: Arvil Stanley Texaco			BORING NUMBER: B-1	
JOB NUMBER: 93-159-E			DATE: February 9, 1993	
SITE LOCATION: Starlite Dr & US 52, Mt. Airy, NC			GEOLOGIST: T. Cahill	
DEPTH IN FEET	SAMPLE NO.	SAMPLE TYPE	DESCRIPTION OF MATERIAL	STD PEN.
2	-	cuttings	gray sand with gravel (crusher run); slight hydrocarbon odor	
10	s1	spltspn	brownish gray micaceous silt grading downward to poorly sorted white & brown micaceous sandy silt; slight hydrocarbon odor; OVA = 50 ppm	2 / 3 / 3
15	s2	spltspn	white & brown poorly sorted sandy silt w/ coarse qtz grains no hydrocarbon odor; OVA < 25 ppm	4 / 3 / 5
20	s3	spltspn	white & brown poorly sorted sandy silt w/ coarse qtz grains no hydrocarbon odor; OVA < 25 ppm	4 / 5 / 7
25	s4	spltspn	moist gray & white poorly sorted silty sand slight hydrocarbon odor; OVA = 75 ppm	6 / 7 / 8
30	s5	spltspn	moist gray & white poorly sorted silty sand	10 / 12 / 12
35	s6	spltspn	wet gray & white poorly sorted silty sand	7 / 12 / 15
			<i>average refusal @ 38.5'</i> <i>grt water ~ 32' (sample cap. fringe)</i>	

CITY MAP ENCLOSED; COPY OF TAX MAP ENCLOSED

- A. USGS Quadrangle or City/County base map upon which the following information is exhibited:

Location of all relevant physical features; this would include roads and, in the case of USGS maps, buildings. Identify roads with State Highway identification number. A North indicator arrow and a scale must be included. be an inset of the detailed map described below)

- B. Detailed map of UST excavation area to scale and including:— See Back of This Page.

1. Buildings, parking lots, roads and driveways ✓
2. Property boundaries ✓
3. Location and orientation of USTs, pumps and product lines ✓
4. Length, diameter and volume of USTs ✓
5. Type of material(s) stored in USTs (current and previous usage) ✓
6. Sample locations in UST and product line excavation areas. Identify location by letter(s) and/or number(s) for later reference (Do not reuse sample numbers on the same site.) ✓
7. ✓

- C. Description of soil sampling points and procedure (also see Section II.A, II.B, II.F and Details A and B below):

1. Depth (below land surface) at which sample was collected
2. If sample was collected from the side or floor excavation
3. Depth of tank burial (from land surface to bottom of tank)

- #### D. Description of Quality Control Measures:

1. Sample method used, i.e. shovel, auger, etc. — DACK
2. Sample preservation and transportation — Samples kept
3. Collection tools decontaminated protocol — shipped in a
4. Time and date of sample collection and submittal date — to laboratory (chain-of-custody required)

- E. Sample results must include the following:

1. Copy of original laboratory results with all requisite dates and signatures included following the proper protocol
2. Copy of completed chain-of-custody with all requisite dates and signatures included following the proper protocol
3. Reference to sampling point shown on map
4. Method of analysis used (see Section II.D and II.E below)

- F. A manifest or other document establishing the final disposition of the excavated soil, tanks and remnant tank contents (sludge). If the soil is taken to a brickyard or other means of approved remediation are used, confirming documentation must be provided.

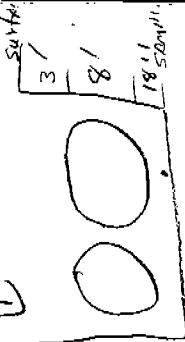
under island and piping taken 2' below surface
under island - " " 17.5' below surface.

SAMPLES UNDER 15 min.
SAMPLES under TASK TAKEN
- All samples from floor.

- All samples from bottom of tank

Backhoe Buckart
Units kept in Refrigerator until all samples taken and
then BACKS TO LAB.

See Lab Report and Chain of Custody form.



enclosed

Product 941

back of this page

see Lab report.

To be returned to the donor

21 BK sold to Donald Beck Sept 11c Service.

copy of bill of sale enclosed

ADAMS MILLIS

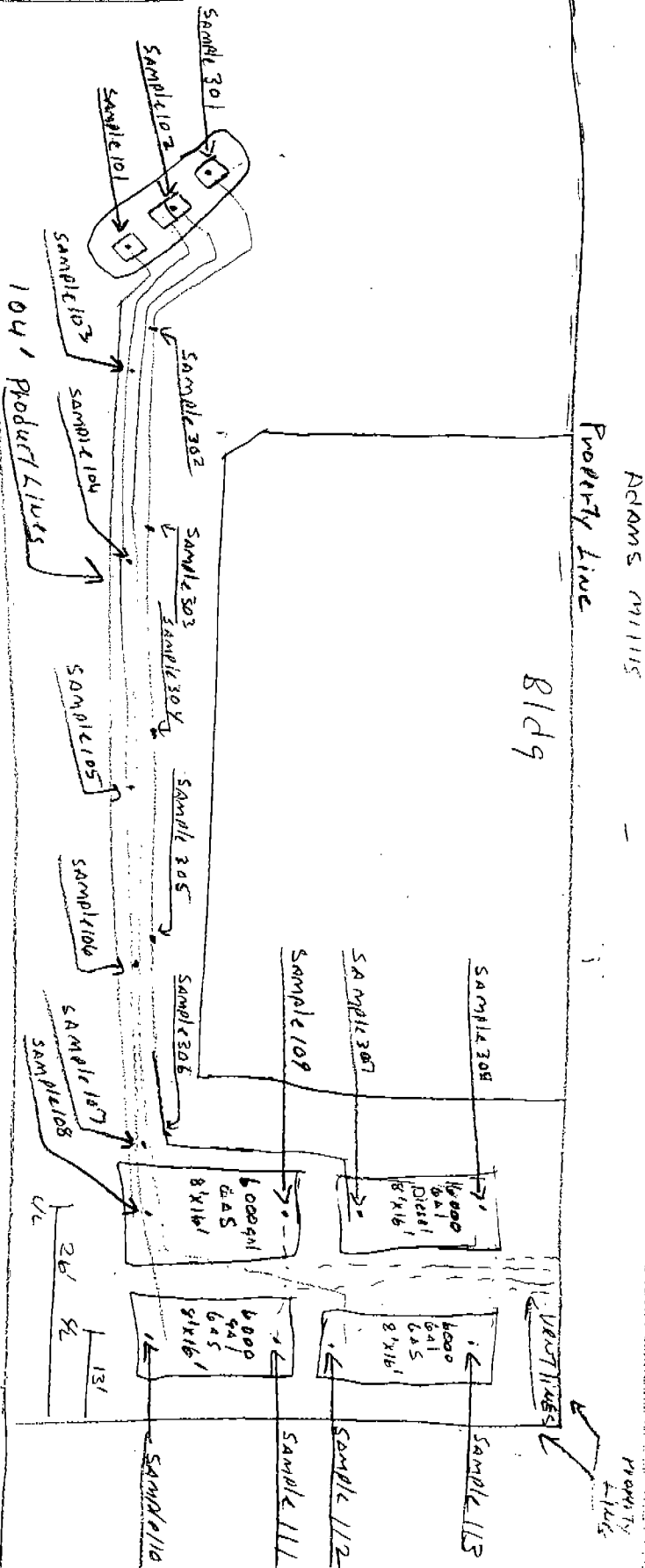
Property Line

8149

S. MAIN Street

Back Street

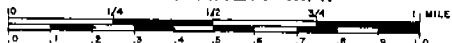
Wilson Street



South Main Service Center

MOUNT AIRY & VICINITY
INCLUDING DOBSON, PILOT MOUNTAIN
TOAST, FLAT ROCK, & BANNERTOWN
SURRY COUNTY, NORTH CAROLINA

URBAN AREA MAP



COPYRIGHT NOVEMBER 1990

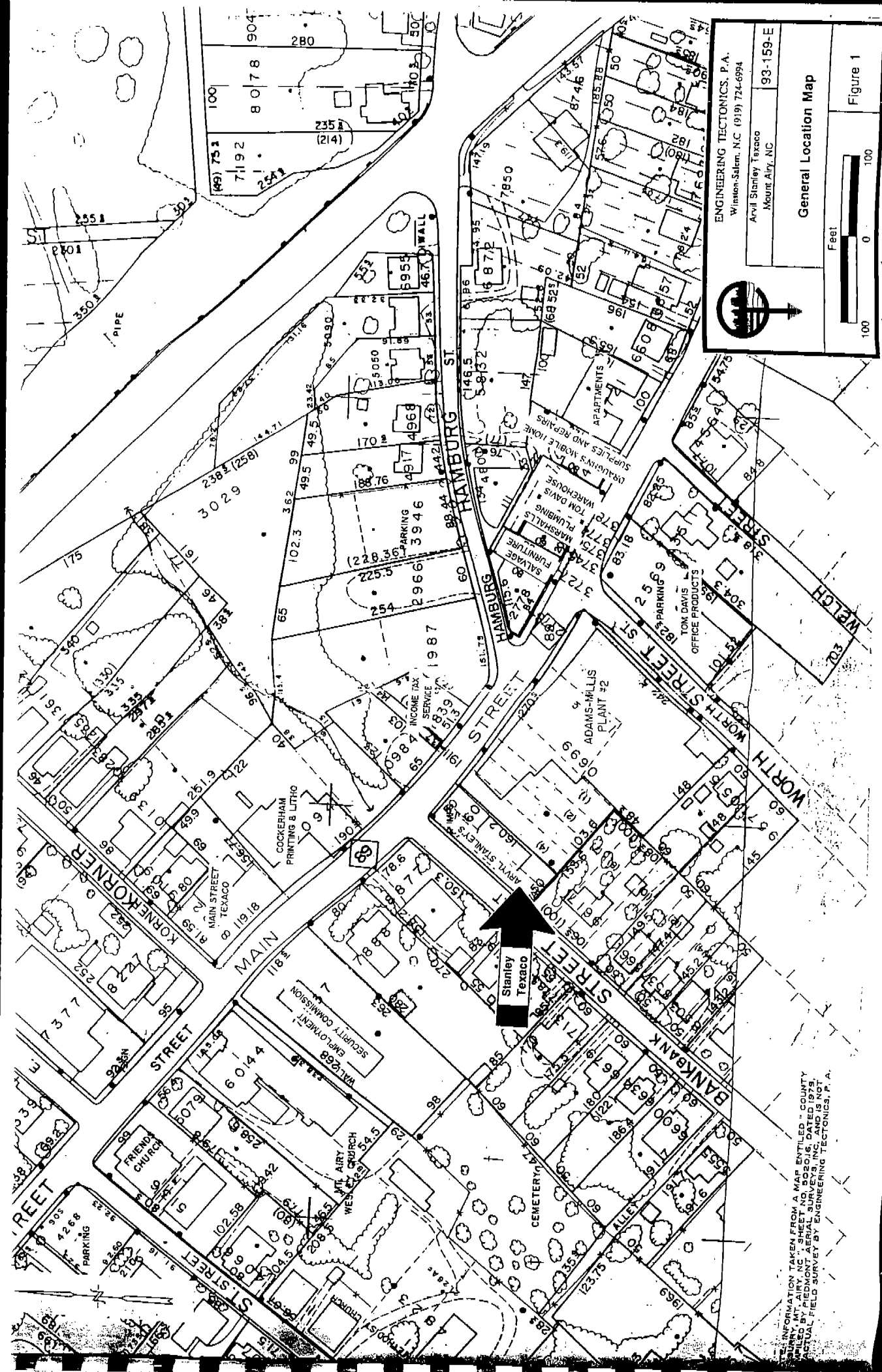
SUPERIOR MAP CO

P. O. BOX 401
HIGH POINT, N. C. 27261

15 Easting Indexed N/E 1,000 Feet 20

25

JAMES LN	18/20	LONDON LN	02/31	WILSON ST	02/27	WILSON ST	10/26	WILSON ST	12/17	MOUNTAIN VIEW RD	13/28	WILSON ST	09/20	WILSON ST	15/30	WILSON ST	17/20	WILSON ST
JAMES LN	12/27	LONDON LN	02/31	WILSON ST	02/27	WILSON ST	10/26	WILSON ST	12/17	MOUNTAIN VIEW RD	13/28	WILSON ST	09/20	WILSON ST	15/30	WILSON ST	17/20	WILSON ST
JAMES LN	06/26	LONDON LN	02/31	WILSON ST	02/27	WILSON ST	10/26	WILSON ST	12/17	MOUNTAIN VIEW RD	13/28	WILSON ST	09/20	WILSON ST	15/30	WILSON ST	17/20	WILSON ST
JAMES LN	11/26	LONDON LN	02/31	WILSON ST	02/27	WILSON ST	10/26	WILSON ST	12/17	MOUNTAIN VIEW RD	13/28	WILSON ST	09/20	WILSON ST	15/30	WILSON ST	17/20	WILSON ST
JAMES LN	12/27	LONDON LN	02/31	WILSON ST	02/27	WILSON ST	10/26	WILSON ST	12/17	MOUNTAIN VIEW RD	13/28	WILSON ST	09/20	WILSON ST	15/30	WILSON ST	17/20	WILSON ST
JAMES LN	09/26	LONDON LN	02/31	WILSON ST	02/27	WILSON ST	10/26	WILSON ST	12/17	MOUNTAIN VIEW RD	13/28	WILSON ST	09/20	WILSON ST	15/30	WILSON ST	17/20	WILSON ST
JAMES LN	12/27	LONDON LN	02/31	WILSON ST	02/27	WILSON ST	10/26	WILSON ST	12/17	MOUNTAIN VIEW RD	13/28	WILSON ST	09/20	WILSON ST	15/30	WILSON ST	17/20	WILSON ST
JAMES LN	09/26	LONDON LN	02/31	WILSON ST	02/27	WILSON ST	10/26	WILSON ST	12/17	MOUNTAIN VIEW RD	13/28	WILSON ST	09/20	WILSON ST	15/30	WILSON ST	17/20	WILSON ST
JAMES LN	12/27	LONDON LN	02/31	WILSON ST	02/27	WILSON ST	10/26	WILSON ST	12/17	MOUNTAIN VIEW RD	13/28	WILSON ST	09/20	WILSON ST	15/30	WILSON ST	17/20	WILSON ST
JAMES LN	09/26	LONDON LN	02/31	WILSON ST	02/27	WILSON ST	10/26	WILSON ST	12/17	MOUNTAIN VIEW RD	13/28	WILSON ST	09/20	WILSON ST	15/30	WILSON ST	17/20	WILSON ST



ENGINEERING TECTONICS, P.A.
Winston-Salem, NC (919) 724-6994

Arvil Stanley Texaco
Mount Airy, NC

93-159-E

General Location Map

Figure 1

Feet
100 0 100

ALL INFORMATION TAKEN FROM A MAP ENTITLED "COUNTY SURVEY, NC", SHEET NO. 503, DATED 1979, AS CALLED BY RECORDS OF THE PLAT BOOKS OF MOUNT AIRY, NC. THIS MAP WAS PREPARED BY AN ACTUAL FIELD SURVEY BY ENGINEERING TECTONICS, P.A.